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# MASTER FILE

DSSD CENSUS 2000 PROCEDURES AND OPERATIONS MEMORANDUM SERIES # L-5

MEMORANDUM FOR

Ruth Ann Killion

Chief, Planning, Research, and Evaluation Division

From:

Howard Hogan

Chief, Decennial Statistical Studies Division

Subject:

Study Plan for A7.a: Census 2000 Mail Response Rates

Attached is the study plan for A7.a: Census 2000 Mail Response Rates. The Census 2000 Evaluation Program quality assurance process was applied to the methodology development and the study plan review process. The study plan is sound and appropriate for completeness and accuracy, and it answers its intended category questions as appropriate.

If you have questions about this study plan, please contact Hebert F. Stackhouse on 301-457-8026.

Attachment (A7.a: Census 2000 Mail Response Rates)

cc:

Joyce Price

DSSD Census 2000 Procedures and Operation Memorandum Series Distribution List

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# CENSUS 2000 OPERATIONAL SUMMARY STUDY PLAN A.7.a

#### I. NAME OF OPERATION

Study of Census 2000 Mail Response Rates

## II. PROJECT MANAGER

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#### III. OPERATIONAL BACKGROUND

#### A. Past Censuses and Tests

#### 1. 1990 Census

In the 1990 Census, the United States Postal Service (USPS) was the primary vehicle for delivering census questionnaires. Based on a master address list, the Census Bureau mailed questionnaires to about 86.2 million housing units in areas designated as being mailout/mailback. Occupants were asked to complete the forms and mail them back in the provided postage paid envelope. In areas designated as update/leave, enumerators visited approximately 10.3 million housing units, verified addresses, and left questionnaires for occupants to complete and mail back in the provided postage paid envelope.

In the 1990 Census, both a questionnaire and a mail reminder card were delivered to all housing units in the mailout/mailback universe. The reminder card was delivered on March 30, approximately seven days after the questionnaire mailout. Census Day was officially April 1.

Staff calculated the mail response rate by dividing the number of mail returns by the total mailout, with the denominator including vacant and nonexistent as well as occupied housing units. The national mail response rate was 65 percent, and nonresponse followup (NRFU) was planned based on housing units that had not returned their questionnaires. For details on the 1990 mail response rates, see DSSD Census 2000 Procedures and Operations Memorandum Series #L-1 (Dimitri 1999a).

#### 2. Census 2000 Dress Rehearsal

The Census 2000 Dress Rehearsal was conducted in three areas:
Columbia, South Carolina, and 11 surrounding counties, Menominee
County, Wisconsin, including the Menominee American Indian
Reservation, and Sacramento, California. Each site was selected because
of its demographic and geographic characteristics to provide experience
with some of the expected Census 2000 environments. The South
Carolina site was a mixture of mailout/mailback and update/leave
addresses, the Menominee site was entirely update/leave, and the
Sacramento site was entirely mailout/mailback.

There were four components of mailout/mailback delivery: an advance letter, an initial questionnaire, a reminder card, and a "blanket" replacement questionnaire (mailed to all addresses). These items used first-class postage and were distributed by the USPS as part of the regular postal routes. The advance letter was mailed to each address between March 24 and 27, 1998. The initial questionnaire was mailed between March 28 and 31. The reminder card was sent to housing units between April 3 and 6. Replacement questionnaires were mailed between April 15 and 17. Census Day was officially April 18.

The update/leave methodology involved Census Bureau enumerators delivering questionnaires at the same time they updated maps and the list of addresses. Update/leave delivery of questionnaires took place between March 14 and April 10, 1998. In ZIP codes that consisted entirely of update/leave housing units, the USPS delivered an advance letter and a reminder postcard to "postal patrons" using third-class postage.

Under both methodologies, respondents were asked to mail back their questionnaires in provided postage paid envelopes.

Short and long form questionnaires were included in both delivery methodologies. Every housing unit received either a short or a long form. The long form sampling rate for the dress rehearsal varied according to site.

Response rate was defined to include in its numerator the number of housing units in the mailback universe that returned a questionnaire that was not blank. The response rate denominator included the number of housing units in the mailback universe that were either mailed a questionnaire or - in update/leave areas - received one delivered by a census enumerator. Housing units with an undeliverable status were

included in these denominators. The mail response rates for the Dress Rehearsal were:

Site	Mail Response Rate		
	Short form	Long form	Total
South Carolina	56.8 %	45.6 %	55.0 %
Sacramento	55.4 %	40.7 %	53.0 %
Menominee	40.6 %	32.4 %	39.4 %

For more information on the Mail Response Rates for the Dress Rehearsal, see the decision memorandum on these rates (Hogan 1998).

#### B. Census 2000

In Census 2000, the questionnaire mailout/mailback system was the primary means of census-taking. Cities, towns, and suburban areas with city-style addresses (house number and street name) as well as rural areas where city-style addresses are used for mail delivery comprised the mailout/mailback areas. Update/leave areas consist of addresses that are predominantly not city-style. Census enumerators delivered addressed questionnaires to update/leave housing units. Update/leave enumerators also made any necessary corrections or additions to Census maps and address lists as they delivered the questionnaires. In both delivery methodologies, the housing units were provided with first-class postage paid envelopes for returning their questionnaires.

## 1. Types of Mailback Questionnaires

Census 2000 included two types of questionnaires for mailback:

- A short form was delivered to approximately 83 percent of all
  housing units. This form allowed the respondent to list up to 12
  household members. It provided space for reporting the basic
  population and housing data (i.e. relationship, age, sex, race,
  ethnicity, and tenure) for up to six household members and the
  housing unit.
- A long form was delivered to a sample approximately 17 percent
   of all housing units. This form allowed the respondent to list up
   to 12 household members. It included all of the short form

questions, as well as additional questions on the characteristics for up to six household members and the housing unit.

There is one difference between the mailout/mailback questionnaire and the update/leave questionnaire. The update/leave questionnaire gave the respondent the opportunity to correct address information.

## 2. Multiple Mailing Strategy

The Census Bureau used a mail strategy consisting of multiple contacts for Census 2000 in mailout/mailback areas. These contacts were:

- An advance notice letter to every mailout address that alerted households that the census form would be sent to them soon
- A questionnaire to every mailout address
- A postcard to every mailout address that served as a thank you for respondents who had mailed back their questionnaire or as a reminder to those who had not

This multiple mailing strategy used first-class postage for all mailing pieces in mailout/mailback areas. The volume for mailout/mailback areas was approximately 100 million pieces for each mailing.

There was also a mailout strategy used in update/leave areas for reminder postcards and advance notice letters. Advance notice letters were mailed to update/leave housing units that had "good" addresses using first-class mail. Reminder cards were sent to housing units in ZIP codes that consist entirely of update/leave housing units. Those cards were sent to "Residential Customer" and delivered using third-class postage. Consequently, some housing units received the advance notice letter and not the reminder card, some received the reminder card and not the advance notice letter, some received both, and some received neither. The volume for update/leave areas was about 22 million questionnaires.

#### 3. Key Dates in Mailback Schedule

Mailout/Mailback Enumeration Areas:

Event	<u>Date</u>
Advance notice letter delivered	3/06 - 3/08
Mailout of Questionnaire	3/13 - 3/15

Delivery of Reminder Cards	3/20 - 3/22
Census Day	4/01
Cut for NRFU	4/11
Late Cut for NRFU	4/18

## Update/Leave Enumeration Areas:

Event	<u>Date</u>
Delivery of Advance Notice Letters	3/01 - 3/03
Delivery of Questionnaires	3/03 - 3/30
Delivery of Reminder Cards	3/27 - 3/29
Census Day	4/01
Cut for NRFU	4/11
Late Cut for NRFU	4/18

# 4. Delivery of Questionnaires in Other Languages

We mailed census forms in five other languages (Chinese, Korean, Spanish, Tagalog, and Vietnamese) to housing units that request them. The advance notice letter provided the respondent with the opportunity to make this request.

# IV. QUESTIONS TO BE ANSWERED AND METHODOLOGY

- 1. What were the response rates according to...
  - ...form type (long vs. short)?
  - ...type of enumeration area (TEA)?
  - ...collection tract? (Rather than documenting a response rate for every single collection tract, distributions of response rates or averages according to larger levels of geography might be included.)
  - ...state (including Puerto Rico)?
  - ...certain combinations of these characteristics?

#### a. Methodology

Response rate refers to the number of housing units in the mailback universe that had a non-blank questionnaire checked in by the time of the late cut for NRFU over the number of housing units in the mailback universe, expressed as a percentage rounded to the nearest tenth percentage point. That non-blank questionnaire could come in the form of an actual mail return questionnaire, a Be Counted Form (BCF), an internet return, or a response via Telephone Questionnaire Assistance (TQA). Within this document, "response rate" refers to "Census 2000 Mail

Response Rate," as defined in Census 2000 Decision Memorandum No. 111 (Hogan 2000). This is not the same concept as "Census 2000 Initial Response Rate".

The primary source of data for this study is the Decennial Master Address File (DMAF). Each housing unit that is in the mailout/mailback or update/leave universe has a corresponding record on that file with a distinct DMAF twelve digit identification (ID). This variable is known as MAFID. Also available on that file are fields for each housing unit detailing the form type to be delivered, the type of enumeration area, the collection census tract, the state, the date on which a mail return was checked in at a Data Capture Center (DCC), and the means by which that mail return information was received.

We will use the DMAF to calculate response rates. A combination of fields will be used to determine if a given housing unit was in the mailback universe and therefore assigned to be delivered a mail return questionnaire. The mail return check-in month and day variable will indicate if a given housing unit had a corresponding mail return check-in by the time of the late cut for NRFU.

The denominator for a given response rate is determined using a multiple step process.

First, we generate a base universe consisting of distinct housing units according to the variables on the DMAF that correspond to the elements posed in the question above (form type, TEA, tract, and state). The variable names that will be used for these delineations are: ASAM, TEA, TRACT, and ST. See Attachment 1 for a detailed list of these variables and their values.

A given housing unit must satisfy

TEA = 1 or 2 or 6 or 7 or 9

in order to qualify for a response rate denominator, and it can of course be restricted to certain values of these when studying response rates for certain TEAs.

For example, suppose that we wish to obtain the response rate for all mailout/mailback housing units in the state of Texas that received the long form. The base for our denominator would be those housing units that satisfy: ST = 48, TEA = 1, and ASAM = 6.

Given the base for the denominator, certain housing units must be excluded. These are the housing units that initially were added to the DMAF in operations following the mailout. By definition, these housing units cannot be included in the UAA rates since no attempt was made to deliver questionnaires to them until after the mailout period.

We wish to exclude a housing unit from the UAA rate denominator unless the record for the address was added, corrected, moved to a new block, verified, or edited in one of the following operations that occurred prior to Nonresponse Followup:

- Address Listing
- Block Canvassing
- Local Update of Census Addresses (LUCA) 98
- LUCA 98 Field Verification
- LUCA 99 Relisting
- LUCA 98 Appeals
- LUCA 99 Appeals
- Update/Leave Questionnaire Delivery
- Urban Update/Leave Questionnaire Delivery
- 1990 Address Control File
- Dress Rehearsal-specific operations
- 11/97 (or earlier) Delivery Sequence File (DSF)
- 09/98 DSF
- 11/99 DSF

We also wish to exclude those housing units in mailout areas for which the address information was pre-identified as incomplete, as these housing units did not receive a mailout/mailback questionnaire. These housing units are described by variables TEA and UAA. (UAA is described in further detail in Attachment 1.)

We wish to exclude a housing unit from the response rate denominator if:

TEA = 1 or 6 ANDUAA = 8.

Also, it is necessary to exclude all housing units from the mail response rate denominator that were never successfully delivered by either USPS or Census Bureau staff. Any housing unit will be excluded from the response rate denominator if:

#### UAA = 1 or 2 or 3 or 4 or 6 or 7

Finally, any addresses that were deleted by enumerators during U/L or UU/L questionnaire delivery will be excluded from the response rate denominator. This means that if the questionnaire delivery MAF action code (MAC) variable equals D and TEA = 2 or 7 or 9 then the housing unit is excluded.

Once the denominator is set, the response rate numerator can be determined. A housing unit qualifies for the numerator if it is a member of the denominator and it satisfies

 $[MAILD \le 0418 \ and \ (MAILD \ne 0000 \ or \ 0099)].$ 

Response rates will be calculated by dividing the numerator by the denominator, multiplying by 100, and rounding to the nearest tenth percentage point.

The results for the varied response rates will most likely be presented in table format.

#### b. Limitations

A housing unit should be counted toward the numerator if MAILD indicates a check-in date prior to the late cut for NRFU. At this time that date is set at April 18, 2000. Users of the rates should keep in mind that there will be some noise in the data with respect to the date since the NRFU universe must be generated on a flow basis. That is, the NRFU universe of all the housing units is not set instantaneously at midnight of April 18. The actual cut might fall on either side of that date for some housing units. Also, there is some indication that the MAC variable for questionnaire delivery may not have been accurately updated on the DMAF.

#### c. Processing Requirements

## (1) Clerical

No extra work is required for this study plan.

# (2) Keying

Some questionnaires might require manual check-in at the DCCs. The Decennial Systems and Contracts Management Office (DSCMO) will provide a layout of the DMAF. No extra work is required for this study plan.

# (3) Programming and Computer

The DSCMO will produce the DMAF and make it available to the DSSD. The DSSD will be responsible for creating appropriate extracts and computing response rates.

2. What was the pattern of return of completed questionnaires from housing units according to check-in date?

# a. Methodology

In order to answer the question of when housing units returned completed questionnaires, the mail return check-in month and day variable will again be used. This is simply a matter of subdividing the results of question one according to specific MAILD values.

The DSSD will generate bar graphs (national by form type) that illustrate the number of questionnaires checked in during each day of the mailback process and through the late cut for NRFU, which is dependent on the site in question. The DSSD will also create line graphs demonstrating the cumulative effect on response rates from the questionnaires that are checked in during the mailback process.

Another measure of when questionnaires were returned will be presented in table format. These tables will indicate the cumulative response rate at various times in the mailback process. For example, for mailout/mailback areas we might list the cumulative response rate one week after the questionnaire delivery, two weeks after questionnaire delivery, etc.

#### b. Processing Requirements

## (1) Clerical

No extra work is required for this study plan. Questionnaires were checked in via automated systems at the DCCs.

#### (2) Keying

No extra work is required for this study plan.

## (3) Programming and Computer

The DSCMO will produce the DMAF and make it available to the DSSD. The DSSD will be responsible for creating appropriate extracts and tallying check-in data.

3. Was there a difference between long and short forms for the rate of mailback?

# a. Methodology

To determine if there is a disparity between the rates of short form and long form check-in, the DSSD will create the graphs and tables associated with questions one and two according to form type to observe any possible variation. The DSSD also will calculate mail response rates at the national level for each date during the period when households could respond.

## b. Processing Requirements

# (1) Clerical

No extra work is required for this study plan. Questionnaires were checked in via automated systems at the DCCs.

# (2) Keying

No extra work is required for this study plan.

(3) Programming and Computer

The DSCMO produced the DMAF and made it available to the DSSD. The DSSD will be responsible for creating appropriate extracts and tallying check-in data.

4. Did respondents from housing units exhibit a tendency to hold completed forms until close to Census Day?

# a. Methodology

Determining if respondents tended to hold their forms until Census Day will be done by looking for a relative surge in check-in immediately after

April 1. Again, this can be ascertained using the data produced for question two.

# b. Processing Requirements

(1) Clerical

No extra work is required for this study plan.

(2) Keying

No extra work is required for this study plan.

(3) Programming and Computer

The DSCMO will produce the DMAF and make it available to the DSSD. The DSSD will be responsible for creating appropriate extracts and tallying check-in data.

- 5. Does there seem to be a surge in response after the mailout of the reminder postcard for the appropriate enumeration areas?
  - a. Methodology

By examining check-in rates immediately after the scheduled delivery of the reminder card (3/20 - 3/22 for mailout/mailback areas and 3/27 - 3/29 for update/leave areas), the DSSD will determine if the reminder card created a lift in response. Results from question two will be used to answer this question.

- b. Processing Requirements
  - (1) Clerical

No extra work is required for this study plan.

(2) Keying

No extra work is required for this study plan.

(3) Programming and Computer

The DSCMO will produce the DMAF and make it available to the DSSD. The DSSD will be responsible for creating appropriate extracts and tallying check-in data.

6. What was the pattern of check-in of questionnaires between the initial cut for NRFU and the late cut for NRFU?

## a. Methodology

Again, we will use the check-in date field (MAILD) to see how many housing units had a corresponding mail return checked in between the cut for NRFU (4/11) and the late cut for NRFU (4/18). These housing units represent the universe that was initially assigned for NRFU but needed to be removed. The data can again be derived from the results of question two.

The DSSD will generate bar graphs (national) that illustrate the number of questionnaires checked in during this time window. The DSSD will also create line graphs demonstrating the cumulative effect on response rates from the questionnaires that are checked in during the time between the two cuts.

## b. Limitations

As mentioned previously, users of the results from this study should keep in mind that there will be some noise in the data with respect to the two cut dates since the NRFU universe must be generated on a flow basis. The actual cuts might fall on either side of the April 11 and April 18 dates for some housing units.

## c. Processing Requirements

(1) Clerical

No extra work is required for this study plan.

(2) Keying

No extra work is required for this study plan.

(3) Programming and Computer

The DSCMO will produce the DMAF and make it available to the DSSD. The DSSD will be responsible for creating appropriate extracts and tallying check-in data.

# 7. What was the pattern of check-in of questionnaires after the late cut for NRFU?

#### a. Methodology

Check-in date (MAILD) will also be used to identify housing units which had a corresponding mail return checked in after the late cut for NRFU. These housing units were not counted toward response rate and were scheduled for visitation by a NRFU enumerator.

The DSSD will generate bar graphs (at the national level) that illustrate the number of questionnaires checked in after the late cut. The DSSD will also create line graphs demonstrating the cumulative effect on response rates -- in the theoretical scenario that they could be calculated without a date restriction -- from the questionnaires that are checked in during the time after the late cut.

#### b. Limitations

Again, users of the results from this study should keep in mind that there will be some noise in the data with respect to the late cut date since the NRFU universe must be generated on a flow basis.

#### c. Processing Requirements

(1) Clerical

No extra work is required for this study plan.

(2) Keying

No extra work is required for this study plan.

(3) Programming and Computer

The DSCMO will produce the DMAF and make it available to the DSSD. The DSSD will be responsible for creating appropriate extracts and tallying check-in data.

#### V. LIMITATIONS

Obviously the number of response rates and rates of check-in that this study plan could potentially generate will be far more than we wish to document. The level of detail will be limited in some respect. However, many response rates will be calculated and stored in databases without being included in the evaluation report.

Response status in this evaluation is based on check-in by DCC staff rather than the date that the form was actually completed or returned. Therefore, time lags in mail delivery to the DCCs and the timing of shifts for check-in impact the check-in date information.

Additionally, the difference between the check-in date and the date on which the form was sent by the respondent is not necessarily uniform. Processing delays at the DCCs and USPS delays could both be factors to different degrees in different areas and at different times.

Housing units classified as undeliverable as addressed (UAA) and undeliverable housing units in update/leave areas distort the measure of "cooperation." A better measure of potential respondent cooperation than response rate is the number of occupied housing units that returned a questionnaire over the number of housing units to which a questionnaire was delivered that had a final status of occupied. This success rate, also known as the return rate, is not addressed in this evaluation, however. (See evaluation A.7.b, "Census 2000 Mail Return Rates.")

#### VI. MILESTONE SCHEDULE

Activ	ity	Start Date	End Date
1.	Develop Study Plans	06/16/99	05/30/01
2.	Conduct Mailout/Mailback Operation	03/06/00	03/22/00
	Conduct Update/Leave Operation	03/01/00	03/29/00
	Conduct Questionnaire Check-In	03/06/00	05/15/00
	at the DCCs		
3.	Delivery of the USPS Daily Forecast		02/29/00
	Delivery of the DMAF with Complete		08/25/00
	Mail Return Check-In Information		
4.	Start Analysis	09/22/00	
5.	Start/End First Draft of Report	05/22/01	08/16/01
6.	Start/End Second Draft of Report	09/03/01	09/17/01
7.	Prepare Final Report for Signature	09/24/01	09/31/01
8.	Report is Issued		10/31/01

# VII. RELATED STUDIES/OPERATIONS

- A.6.a "Study of Census 2000 Mailout Questionnaires by USPS"
- A.7.b "Study of the Undeliverablity Rates for Census 2000 Mailout Questionnaires"

## VIII. REFERENCES

- Dimitri, C. Robert. "Documentation of 1990 Response and Return Rates", DSSD Census 2000 Procedures and Operations Memorandum Series #L-1 (revised), December 6, 1999.
- Hogan, Howard. "Documentation of Response and Return Rates Definitions for Census 2000", Census 2000 Decision Memorandum No. 111, November 16, 2000.
- Hogan, Howard. "Revision: Documentation of Response and Return Rates for the 2000 Dress Rehearsal and Census 2000", Census 2000 Decision Memorandum No. 65, December 2, 1998.

## DMAF Variables and Values

## From the DMAF Address Files

TEA	Type of Enumeration Area	
	1 = Mailout Mailback	5 = Update Enumerate
	2 = Update Leave	6 = Military in Update Leave Area
	3 = List Enumerate	7 = Urban Update Leave
	4 = Remote List Enumerate	9 = Update Leave (converted from TEA 1)
LCO	Local Census Office Code	
ST	Collection FIPS State Code	
COH	Collection FIPS County Code	

# From the DMAF MAF Status Files

TRACT

MAC(17)	MAF Action Codes	
	A = Add	
	C = Correction	
	D = Delete	
	M = Block Move	
	N = Nonresidential	
	U = Uninhabitable	
	V = Verify	
	E = Edit	,
	The 17 Operations are -	•
	(1) Address Listing	(10) Postal Validation Check
	(2) Block Canvassing	(11) Nonresponse Followup
	(3) LUCA 98	(12) BeCounted Verfication
	(4) LUCA 98 Field Verification	n (13) TQA Verification

Nonresponse Followup Tract

(5) LUCA 99 Relisting
(6) LUCA 98 Appeals
(7) LUCA 99 Appeals
(16) 1990 ACF (A or blank)
(17) Coverage Improvement
(15) New Construction
(16) 1990 ACF (A or blank)
(17) DR Specific (RALS TOTAL)

(8) Special Place/GQ (17) DR-Specific(PALS,TC,TMUC)

(9) Questionnaire Delivery (UL, UE, UUL, LE, or remote AK)

# MSDF MAF DSF Flags

0 = Not indicated in the DSF

1 = Flagged as Residential in the Indicated DSF

2 = Flagged as Nonresidencial in the Indicated DSF

The 6 DSFs are -

(1) 11/97 or earlier

(4) 2/00

(2) 9/98

(5) 4/00

(3) 11/99

(6) unused

# From the DMAF Operational Files

MAFID MAF and DMAF ID

ASAM A Priori Sample

0 = No A Priori Sample (Be Counted or late Field Add)

1 = Short Form 6 = Long Form

REXPAN R&E Panel Numbers (only the applicable values for this specification)

26 = S-900.1 NRFU, incentive, CATI RMIE

27 = S-900.1 NRFU, incentive, ASO RMIE

28 = S-900.1 NRFU, incentive, internet RMIE

MAILD Mail Return Check-in Month and Day

0000 = No Mail Return Check-in

0099 = Reverse Check-in

0101 - 1231 =Check-in Day of 1<sup>st</sup> return

MAILS Mail Check-in Source

0 = No return

1 = Mailback

2 = CATI

3 = Internet

4 = Be Counted

UAA Undeliverable as Addressed

0 = No UAA Checkin

1 = UAA checkin in NPC only

2 = UAA checkin in NPC; in LCO checkin; no LCO checkout

3 = UAA checkin in NPC; no LCO checkin; in LCO checkout

4 = UAA checkin in NPC; in LCO checkin; in LCO checkout

5 = No UAA checkin in NPC; in LCO checkin; no LCO checkout

6 = No UAA checkin in NPC; no LCO checkin; in LCO checkout

7 = No UAA checkin in NPC; in LCO checkin; in LCO checkout

8 = Not enough address information - Excluded from Mail

## HCEF D' Variables and Values

MAFID MAF and DMAF ID (Excluding the 2 Character Check Digit)

Characters 1 - 2 = state code when the MAF ID was assigned

Characters 3 - 5 = county code when the MAF ID was assigned

Characters 6 - 12 = control ID

STENURE "Is this house, apartment, or mobile home-"

(This is the edited value of the RTENURE variable from the HCUF.)

0 = Not in universe (vacant)

1 = Owned by you or someone in this household with a mortgage or loan

2 = Owned by you or someone in this household free and clear (without a mortgage or loan)

3 =Rented for cash rent

4 = Occupied without payment of cash rent

NPHU Number of persons at this housing unit

00 = None

01 - 97 = Persons at this housing unit

QREL Relationship (applicable value for this study only)

01 = Householder

QSPAN Hispanic Origin Code

**QRACE1 - QRACE8** 

First through eighth race codes

QRACEX Race Edit/Allocation Group

This is the race group that was used for allocating in the 100 percent edit/allocation process. This same variable will be used by the sample edit/allocation process.

1 = White

2 = Black, African American, or Negro

3 = American Indian or Alaska Native

4 = Asian

5 = Native Hawaiian or Other Pacific Islander

6 =Some Other Race

**QAGE** 

000-115 = Age